

Remarks:

Reconsideration of the application, as amended herein, is respectfully requested.

Claims 1 - 22 are presently pending in the application.

Claims 1, 7 and 14 have been amended.

In item 2 of the above-identified Office Action, claims 1 - 2, 5, 7 - 8 and 10 - 22 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious over U. S. Patent No. 6,058,844 to Niemiec ("NIEMIEC") in view of U. S. Patent No. 6,298,782 to

Gregory et al ("GREGORY"), U. S. Patent No. 4,508,033 to Fischer ("FISCHER") and U. S. Patent No. 3,875,682 to Justus et al ("JUSTUS"). In item 3 of the above-identified Office Action, claims 3 - 4 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious over NIEMIEC in view of FISCHER and JUSTUS, and further in view of U. S. Patent No. 6,550,390 to Frankenberger ("FRANKENBERGER"). In item 4 of the above-identified Office Action, claims 6 and 9 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious over NIEMIEC in view of FISCHER and JUSTUS, and further in view of U. S. Patent No. 5,913,471 to Makosch et al ("MAKOSCH").

Applicant respectfully traverses the above rejections, as applied to the amended claims.

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More particularly, Applicant's independent claims have been amended to recite that the separating/releasing of the web from the press cylinder occurs during a normal printing operations. For example, Applicant's independent claim 1 recites, among other limitations:

a first apparatus disposed downstream of said press cylinder and upstream of said dryer for separating the web from said press cylinder during a normal printing operation, said separating of the web from said press cylinder being decoupled from the conveying of said web along said path; [emphasis added by Applicant]

Applicant's independent claim 7 recites, among other limitations:

a second pull roll, which is disposed downstream of said press cylinder and upstream of said dryer, for releasing the web during a normal printing operation; [emphasis added by Applicant]

Applicant's independent claim 14 recites, among other limitations:

separating the web from the press cylinder during a normal printing operation, the separating of the web from the press cylinder being decoupled from the conveying of the web along the path; [emphasis added by Applicant]

That the separation of the web from the press cylinder occurs during a normal printing operation is supported by the specification of the instant application, for example, on page 20, lines 10 - 18, which states:

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The web 4 is acted on with printing ink and moisture (possibly on both sides) from the transfer cylinder or cylinders 22, the web 4 tending to remain adhering to the rotating surface of the transfer cylinder 22 because of the fresh printing ink and its adhesive capacity (tack value). In order to separate the web 4 from the transfer cylinders 22, use can be made of an apparatus 27 for separating the web 4 from the press cylinder or transfer cylinder 22, the separating apparatus in the following text, and/or a pulling unit 28. [emphasis added by Applicant]

Additionally, all of Applicant's claims have been amended to recite, among other things, that the tensile stress on the web downstream of the dryer is "considerably lower" than (i.e., "considerably reduced" from) the tensile stress upstream of the printing cylinder. For example, Applicant's claim 1 has been amended to recite, among other limitations:

a pull roll disposed downstream of said dryer for conveying the web along said path with a given tensile stress that is considerably lower than a tensile stress in a printing path upstream of said at least one press cylinder; [emphasis added by Applicant]

Applicant's claim 7 has been amended to recite, among other limitations:

a first pull roll disposed downstream of said dryer to convey the web along the path with a given tensile stress which is considerably lower than a tensile stress in a printing path upstream of said at least one press cylinder; [emphasis added by Applicant]

Similarly, Applicant's amended claim 14 recites, among other limitations:

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setting a second tensile stress of the web, being considerably reduced as compared with the first tensile stress, along the drying path. [emphasis added by Applicant]

That the tensile stress on the web downstream of the dryer is "considerably" lower than or reduced from the tensile stress upstream of the press cylinder is supported by the specification of the instant application, for example, on page 20, lines 2 - 8, which state:

Given appropriately selected rotational speed relationships, the tensile stress along the drying path 7 can be lower than the tensile stress upstream of the printing unit 5 (in a printing path). In particular, the tensile stress along the drying path 7 can be considerably lower than a conventional tensile stress in a printing path, for example in the region of about 10%. [emphasis added by Applicant]

Note that the terms "considerably lower" and "considerably reduced" are definite under 35 U. S. C. §112, in the context of the instant claims. Although "relative terminology" is used, MPEP § 2173.05(b) states, in part:

The fact that claim language, including terms of degree, may not be precise, does not automatically render the claim indefinite under 35 U.S.C. 112, second paragraph. Seattle Box Co., v. Industrial Crating & Packing, Inc., 731 F.2d 818, 221 USPQ 568 (Fed. Cir. 1984). Acceptability of the claim language depends on whether one of ordinary skill in the art would understand what is claimed, in light of the specification. [emphasis added by Applicant]

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A person of ordinary skill in the art would absolutely understand what the terms relating to a "considerably lower" and "considerably reduced" tensile strength from reading the specification of the instant application. For example, page 20 of the instant application, lines 5 - 8, state:

In particular, the tensile stress along the drying path 7 can be considerably lower than a conventional tensile stress in a printing path, for example in the region of about 10%. [emphasis added by Applicant]

Additionally, page 24 of the instant application, lines 22 - 26, state:

As compared with conventional 500 N/m tensile stress, the value can be reduced, for example, to about 50 N/m or even less. Given such low tensile stresses, the web 4 can form a meander-like web path 36 whose radii of curvature are small, preferably can be less than about 200 mm. [emphasis added by Applicant]

Further in support of the clear understanding of the claim language, page 21 of the instant application, lines 11 - 17, states:

The pull roll can interact with an opposing roll 31 and its surface can have an ink-repellent property, so that adhesion of the freshly printed web 4 to the pull roll 20 does not occur and so that the web 4 is released by the pull roll 30 even with a very low tensile stress as compared with conventional tensile stresses between printing units, for example in the range of about 10% or less. [emphasis added by Applicant]

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See also in the instant application, page 8, lines 14 - 19;
page 13, lines 6 - 12; and page 24, lines 5 - 11.

As can be seen from the foregoing, the specification of the instant application provides an understanding to a person of ordinary skill in the art as to the meaning of the terms "considerably lower" and "considerably reduced" tensile stress. In connection with the term "substantially", a similar type of term to Applicant's claimed "considerably", MPEP §2173.05(b) stated:

D. "Substantially"

The term "substantially" is often used in conjunction with another term to describe a particular characteristic of the claimed invention. It is a broad term. *In re Nehrenberg*, 280 F.2d 161, 126 USPQ 383 (CCPA 1960). The court held that the limitation "to substantially increase the efficiency of the compound as a copper extractant" was definite in view of the general guidelines contained in the specification. *In re Mattison*, 509 F.2d 563, 184 USPQ 484 (CCPA 1975). The court held that the limitation "which produces substantially equal E and H plane illumination patterns" was definite because one of ordinary skill in the art would know what was meant by "substantially equal." *Andrew Corp. v. Gabriel Electronics*, 847 F.2d 819, 6 USPQ2d 2010 (Fed. Cir. 1988). [emphasis added by Applicant]

As such, pursuant to MPEP § 2173.05(b), Applicant's claims are believed to be definite under 35 U.S.C. §112, second paragraph.

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Additionally, none of the references cited in the Office Action teach or suggest all limitations of Applicant's claims.

- I. The Prior Art cited in the Office Action fails to teach or suggest separating/releasing the web from the press cylinder during a normal printing operation.

More particularly, as stated above, Applicant's independent claims 1, 7 and 14 require, among other limitations, that the web be separated/released from the press cylinder during a normal printing operation. For example, as stated on page 2 of the Office Action:

Niemiec does not teach an apparatus downstream of the press cylinder and upstream of the dryer for separating the web from said press cylinder, said separating being decoupled [sic] from the conveying of the web along the path, or a second pull roll, in the form of a driven, rotating element, disposed downstream of said press cylinder and upstream of said dryer; or a second apparatus for driving said pull roll, said second apparatus driving said first pull roll at a rotational speed being reduced as compared with a rotational speed of said press cylinder in order to set the tensile stress to a value suitable for conveying the web after separation from the press cylinder.

Rather, the Office Action, on page 3, points to GREGORY as allegedly disclosing a separating apparatus and FISCHER as allegedly disclosing a pull roll disposed downstream of a press cylinder and upstream of a dryer.

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However, the GREGORY and FISCHER references solely disclose web catchers which are designed to contact the web in case of a web break, in order to avoid the wet printed web to wrap around the press cylinder and damage the bearings and other parts of the cylinder. The devices disclosed in GREGORY and in FISCHER are never used to separate or release the web "during a regular printing operation", as required by Applicant's claims. Rather, during a normal printing operation, when the web is running through the dryer, the devices of GREGORY and FISCHER remain inactive and do not separate the web from the press cylinder. Their failure to separate the web during a normal printing operation can be seen from GREGORY and FISCHER. For example, the Abstract of GREGORY states:

A system and method for preventing a broken printing web from wrapping about or otherwise fouling the blanket cylinders of printing press units. The system and method includes a web tensioning device located downstream of the printing press units for maintaining tension upon a broken web and pulling the web from the printing press units. The device includes a plurality of web disturbance detectors for detecting a wave, ripple or other disturbance indicative of a web break. A pair of anti-wrap rollers located above and below the web are engaged upon detection of a web break to engage the web between them to exert tension onto the web and pull it from the printing units. The anti-wrap rollers are rotated at a surface speed nominally greater than the surface speed of the printing rolls. The anti-wrap rollers include a plurality of opposed peak and valley portions which enable them to interlock and grip the web along a line of contact. The system and method also includes a flow bar system to reduce false detections of a web break. A blow-down bar is also used to force air, or some other fluid,

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downward on a broken web so as to harmlessly force the broken web to the ground as it exits the web tensioning device. A series of sensors which project two beams in the form of a crossing pattern are utilized to more rapidly and accurately detect a web break. [emphasis added by Applicant]

Similarly, the Abstract of FISCHER states:

The paper web capturing apparatus includes two capturing rollers, preferably disposed downstream of the last printing station, which when used in a prime-and-verso printing machine both have the same diameter as the printing station cylinders. Both cylinders acting as capturing rollers are provided with a rubber blanket and are driven at approximately the linear speed of the web. They are in continuous engagement with the web of material to be printed. During normal operation, the cylinders of the capturing apparatus ~~effect an enhancement of the printing, in particular~~ of the color printed at the last printing station, and in the event of web tearing the web is wrapped about one of the cylinders, which are positioned resiliently against one another. [emphasis added by Applicant]

As such, none of NIEMIEC, GREGORY or FISCHER, teach or suggest separating/releasing the web from the press cylinder during a normal printing operation.

Further, the JUSTUS reference, cited on page 3 of the Office Action, in combination with NIEMIEC, GREGORY and FISCHER, similarly fails to teach or suggest separating the web from the press cylinder during a normal printing operation.

Rather, the Office Action states on page 3, with reference to JUSTUS:

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Justus et al. teaches an apparatus for driving a pull roll for a web at a rotational speed being reduced as compared to a rotational speed of a press cylinder in order to set the tensile stress to a value suitable for conveying the web after separation from the press cylinder. See column 2, line 65 - column 3, line 4.

Applicant respectfully traverses the above argument. More particularly, JUSTUS is solely related to a paper web in a paper-making machine, which is usually not printed, and which does not stick to the cylinders or rolls. Rather, during a regular printing operation, the freshly printed web of a web fed printing press strongly adheres to the blanket cylinders due to the adhesive properties of the wet ink, which is also known as "ink tack". Due to this "ink tack", conventional printing presses need separating devices (web catchers) as described in Gregory and Fischer, in order to avoid any damage to the press cylinders when a web break. However, Applicant's claims now require, among other things, that the separation/release of the web from the press cylinder occur during a normal printing operation, while JUSTUS discloses a system that fails to teach or suggest any printing operation at all. As such, the problem of avoiding any damage to the press is not at all addressed by JUSTUS, and a person skilled in the art would not have thought to combine NIEMIEC, GREGORY and FISCHER with JUSTUS, absent impermissible hindsight reconstruction.

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As such, it is believed that Applicant's claims are patentable over the NIEMIEC, GREGORY, FISCHER and JUSTUS references, considered alone, or in combination.

II. None of the references cited in the Office Action teach or suggest a "considerably lower" or "considerably reduced" tensile stress of the web downstream of the dryer than upstream of the press cylinder.

Further, as stated above, Applicant's claims have been amended to recite, among other limitations, a "considerably lower" or "considerably reduced" tensile stress of the web downstream of the dryer than upstream of the press cylinder. However, none

of the references cited in the Office Action teach or suggest a "considerably lower" or "considerably reduced" tensile stress of the web downstream of the dryer than upstream of the press cylinder, as defined by the instant application.

Rather, according to page 3 of the Office Action, a reduced tensile stress is allegedly disclosed in col. 2 of JUSTUS, line 65 - col. 3, line 4. Applicant respectfully disagrees that the cited portion of JUSTUS teaches or suggests a "considerably" lower/reduced tensile stress downstream of the dryer than upstream of the press cylinder.

More particularly, col. 2 of JUSTUS, line 65 - col. 3, line 4, states:

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The roll is driven in rotation in a direction the same as the web travel, and it has been found that by driving the roll at a speed slower than the web travel, the tendency of the edge roll to eliminate flutter is enhanced. A rotational speed of preferably 75 per cent of the speed of web travel is used and variations from 50 to 100 per cent of the speed of web travel also may be employed.

As such, JUSTUS discloses a rotational speed variation of from 50 to 100 percent, but, preferably, of 75 percent. As such, JUSTUS fails to teach or suggest Applicant's "considerably" lower/reduced tensile stress downstream of the dryer than upstream of the press cylinder, which Applicant's specification puts in the range of about 10 percent or less.

See page 20 of the instant application, lines 2 - 8 and page 21 of the instant application, lines 10 - 17.

None of the remaining references cited in the Office Action, including NIEMIEC, GREGORY and FISCHER, teach or suggest Applicant's particularly claimed "considerably lower" or "considerably reduced" tensile stress of the web downstream of the dryer than upstream of the press cylinder.

Further, none of the NIEMIEC, GREGORY, FISCHER and JUSTUS references, disclose such a "considerably lower" or "considerably reduced" tensile stress of the web downstream of the dryer, in combination with a decoupling of the separation of the web from the conveying operation of the web in the

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dryer, as particularly claimed in Applicant's present claims 1 and 14

As such, it is believed that Applicant's claims 1, 7 and 14 are patentable over the NIEMIEC, GREGORY, FISCHER and JUSTUS references, considered alone, or in combination.

III. Conclusion.

The FRANKENBERGER and MAKOSCH references, cited in combination with NIEMIEC, FISCHER and JUSTUS against certain of Applicant's dependent claims, ~~does not cure the above~~ discussed deficiencies of the NIEMIEC, GREGORY, FISCHER and JUSTUS references.

It is accordingly believed that none of the references, whether taken alone or in any combination, teach or suggest the features of claims 1, 7 and 14. Claims 1, 7, and 14 are, therefore, believed to be patentable over the art. The dependent claims are believed to be patentable as well because they all are ultimately dependent on claims 1, 7 or 14.

In view of the foregoing, reconsideration and allowance of claims 1 - 22 are solicited.

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In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate receiving a telephone call so that, if possible, patentable language can be worked out.

Additionally, please consider the present as a petition for a one (1) month extension of time, and please provide a one (1) month extension of time, to and including, June 24, 2006, to respond to the present Office Action.

The extension fee for response within a period of one (1) month pursuant to Section 1.136(a) in the amount of \$120.00 in accordance with Section 1.17 is enclosed herewith.

Please provide any additional extensions of time that may be necessary and charge any other fees that might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner, Greenberg, Stemmer, L.L.P., P.A., No. 12-1099.

Respectfully submitted,



For Applicant
June 26, 2006

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